

AMENDMENT TO THE CLAIMS

Please cancel claims 2 and 5 without prejudice to applicant later filing related divisional and/or continuation applications thereto; and amend claims 1, 3, 11 and 17, wherein matter to be added is shown in underline and matter to be deleted is shown in strikethrough as follows:

1. (currently amended) A connector for a circuit conducting high frequency signals comprising:

a) a housing including an input and an output terminal coupled to a data pathway conducting signals in excess of 1 gigahertz; and

b) a passive circuit defined on a cylindrical substrate coupled between said input and output terminals that exhibits a complementary impedance characteristic to that of said data pathway and comprised of at least one resistor and at least one capacitor and wherein said resistor is defined by a resistive layer that comprises a plate of said capacitor, whereby an extended range of intelligible data signals is obtained.

Claim 2 (cancelled)

3. (currently amended) A connector as set forth in claim 1 ~~2~~ wherein said input and output ports are connected to individual conductors of a multi-conductor cable.

4. (original) A device as set forth in claim 1 wherein said resistive layer is formed of a material selected from a class of materials including tantalum oxide, silicon dioxide, silicon nitride, or nickel chrome.

Claim 5 (cancelled)

6. (original) A device as set forth in claim 1 wherein said resistor and capacitor are coupled to one another in shunt.

Claims 7-10 (cancelled)

11. (currently amended) A connector for high frequency signals comprising:

- a) a housing including at least one a plurality of input and output terminal
~~terminals~~ coupled to a cylindrical substrate containing at least one data pathway a
~~plurality of data pathways~~ respectively conducting data signals in excess of 1 gigahertz
between said input and output terminals; and
- b) a passive thin film circuit ~~plurality of passive thin film circuits~~ mounted to said
substrate and ~~each~~ serially coupled to said input and output terminals at an input and an
~~output port to one of said data pathways~~, wherein said ~~each~~ thin film circuit exhibits a
predetermined impedance characteristic complementary to that of the data pathway
~~pathways~~ to data signals in excess of a predetermined frequency, and wherein said ~~each~~
thin film circuit comprises a plurality of resistors and capacitors coupled between said
input and said output port, wherein said ~~each~~ thin film circuit comprises a substrate, first
and second layers defining first and second plates of said capacitors, a dielectric layer
intermediate said first and second layers, and wherein one of said first and second layers
defines said resistors.

12. (original) A device as set forth in claim 11 wherein the one of said first and
second layers that defines said resistors is formed of a material selected from a class of
materials including tantalum oxide, silicon dioxide, silicon nitride, or nickel chrome.

Claims 13 - 16 (cancelled)

17. (currently amended) A connector for high frequency signals comprising:

- a) a connector body having a housing adapted for interconnection with input and
output conductors; and

b) a cylindrical core piece supported within said housing and having a substrate and a plurality of layers deposited over said substrate, wherein said layers include first and second conductive layers that define first and second plates of a capacitor, a dielectric layer sandwiched between said first and second conductive layers, and wherein one of said first and second conductive layers also defines a resistor, and wherein said core piece exhibits a predetermined impedance characteristic complementary to data signals conveyed by said input and output conductors.

18. (original) A device as set forth in claim 17 wherein said substrate comprises a cylindrical conductive member concentrically mounted to adjacent tubular conductors connected to said input and output conductors.

19. (original) A device as set forth in claim 17 wherein said core piece includes an annular band of conductive material that electrically couples to one of said input and output conductors.

20. (original) A device as set forth in claim 17 wherein said substrate comprises a tubular member concentrically mounted to adjacent conductors connected to said input and output conductors.

21. (original) A connector for high frequency signals comprising:

a) a coaxial connector body having a housing adapted for interconnection with input and output conductors; and

b) an electrically conductive core piece supported within said housing and having a plurality of layers including a first conductive layer defining a resistor and a first plate of a capacitor, a dielectric layer overlying said first conductive layer, and a second conductive layer overlying said dielectric layer and defining a second plate of said

capacitor, and wherein said core piece exhibits a predetermined impedance characteristic complementary to data signals conveyed by said input and output conductors.

22. (original) A device as set forth in claim 21 wherein said core piece comprises a cylindrical conductive substrate containing said first and second conductive layers and said dielectric layer and concentrically mounted to adjacent conductors connected to said input and output conductors.

23. (original) A device as set forth in claim 22 wherein said core piece comprises a tubular substrate.